

CLAIMS

What is Claimed is:

1. A fluorescent device comprising a phosphor adhesive glass composite and a
5 phosphor,

wherein the phosphor adhesive glass composite is expressed by $x\text{SiO}_2 \cdot y\text{B}_2\text{O}_3 \cdot a\text{ZnO} \cdot b\text{Al}_2\text{O}_3 \cdot c\text{MgO} \cdot m\text{XO}$ where X is at least one element selected from the group consisting of Ca, Sr and Ba, $5 \leq x \leq 70$ mol%, $0 \leq y \leq 30$ mol%, $x+y \geq 20$ mol%, $5 \leq m \leq 60$ mol%, $a \leq 40$ mol%, $b \leq 10$ mol%, $c \leq 10$ mol%, and $a+b+c \geq 10$ mol%.

- 10 2. The fluorescent device of Claim 1, wherein the phosphor is an oxysulfide phosphor.
3. The fluorescent device of Claim 2, wherein $0 \leq y \leq 15$ mol% and $6.5 \leq m \leq 60$ mol%.
4. The fluorescent device of Claim 2, wherein the oxysulfide phosphor is europium activated yttrium oxysulfide phosphor.
5. The fluorescent device of Claim 1, wherein the fluorescent device further contains
15 Tb^{3+} and $1 \leq \text{Tb}^{3+} \leq 4$ mol%.

6. A fluorescent lamp comprising a phosphor adhesive glass composite and a phosphor,
wherein the phosphor adhesive glass composite is expressed by $x\text{SiO}_2 \cdot y\text{B}_2\text{O}_3 \cdot a\text{ZnO} \cdot b\text{Al}_2\text{O}_3 \cdot c\text{MgO} \cdot m\text{XO}$ where X is at least one element selected from the group consisting of Ca, Sr and Ba, $5 \leq x \leq 70$ mol%, $0 \leq y \leq 30$ mol%, $x+y \geq 20$ mol%,
20 $5 \leq m \leq 60$ mol%, $a \leq 40$ mol%, $b \leq 10$ mol%, $c \leq 10$ mol%, and $a+b+c \geq 10$ mol%,

the phosphor is an oxysulfide phosphor, and

a discharge path is nonlinear.

7. The fluorescent lamp of Claim 6, wherein $0 \leq y \leq 15$ mol% and $6.5 \leq m \leq 60$ mol%.
8. The fluorescent lamp of Claim 6, wherein the oxysulfide phosphor is europium
25 activated yttrium oxysulfide phosphor.
9. A glass composite, wherein

the glass composite is expressed by $x\text{SiO}_2 \cdot y\text{B}_2\text{O}_3 \cdot a\text{ZnO} \cdot b\text{Al}_2\text{O}_3 \cdot c\text{MgO} \cdot m\text{XO}$ where

X is at least one element selected from the group consisting of Ca, Sr and Ba,
 $5 \leq x \leq 70 \text{mol\%}$, $0 \leq y \leq 30 \text{mol\%}$, $x+y \geq 20 \text{mol\%}$, $5 \leq m \leq 60 \text{mol\%}$, $a \leq 40 \text{ mol\%}$, $b \leq 10 \text{mol\%}$,
 $c \leq 10 \text{mol\%}$, and $a+b+c \geq 10 \text{mol\%}$.